

ABSTRACT OF THE DISCLOSURE

A hydrogen supply unit is provided that can efficiently supply hydrogen gas both to a fuel cell used as a stationary electric power supply and to a fuel cell used as a mobile electric power supply. The hydrogen supply unit includes a reformer 5 that reforms a source gas to generate hydrogen gas, a first storage device 7 that stores hydrogen gas and supplies the hydrogen gas to a first fuel cell 2, and a second storage device 8 that stores hydrogen gas and supplies the hydrogen gas to a second fuel cell 3. For the storage device 8, there is arranged a compressor 13 that pressurizes hydrogen gas. For both storage devices 7 and 8, there is arranged a purifier 6 between the reformer 5 and both storage devices so that both storage devices store purified hydrogen gas. The storage device 7 utilizes a hydrogen absorbing alloy, and releases hydrogen gas by taking advantage of the waste heat of the reformer 5 or the waste heat of the fuel cell 2. The hydrogen gas stored in the storage device 8 is pressurized to 10 to 70 MPa. The hydrogen supply unit includes a remaining amount detecting sensor 14 for hydrogen gas that detects the remaining amount of the hydrogen gas in the storage device 8, and a control device 15 that feedback controls the reformer 5 on the basis of the above described remaining amount of the hydrogen gas.